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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,958	08/04/2003	Takeshi Ikeda	03500.017465	4484
5514 7590 10/09/2007 FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			EXAMINER HENN, TIMOTHY J	
			ART UNIT 2622	PAPER NUMBER
			MAIL DATE 10/09/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/632,958	<b>Applicant(s)</b> IKEDA, TAKESHI	
	<b>Examiner</b> Timothy J. Henn	<b>Art Unit</b> 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 2-6, 13-15 and 19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2, 13 and 19 is/are rejected.
- 7) ☒ Claim(s) 4-6, 14 and 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Drawings***

2. The drawings were received on 23 July 2007. These drawings are accepted.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 13 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iura et al. (US 5,847,756) in view of Nanjo et al. (US 6,771,315).

#### **[claim 2]**

Regarding claim 2, Iura discloses an image pickup apparatus including an iris mechanism (Figure 18, Item 202) for changing an amount of light with which an image pickup element (Figure 18, Item 203) is irradiated by changing an aperture diameter (Figure 19; c. 18, ll. 58-65), the image pickup apparatus being capable of changing between a first mode for recording a plurality of frames and a second mode for recording one frame in accordance with a predetermined action (c. 2, ll. 13-28; c. 19, l. 2

- c. 20, l. 5). However, Iura does not disclose a filter unit and control unit for controlling the filter unit as claimed.

Nanjo discloses that when using an iris diaphragm and the aperture becomes too small the quality of the captured image is reduced (c. 1, ll. 16-27). Nanjo further discloses that this problem can be solved by including an ND filter on an aperture blade to prevent deterioration of image quality (c. 3, l. 66 - c. 4, l. 7; Figures 14 and 15; note the use of a single density filter). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include an ND filter on the diaphragm of Iura to prevent deterioration of image quality when capturing images with a small diaphragm aperture. The examiner notes that since Iura discloses the use of the diaphragm for both still and video capturing according to an image signal luminance (Figure 19) and Nanjo discloses a filter which partially covers an aperture (Figure 15a) as well as fully covers an aperture (Figure 15f), Iura in view of Nanjo discloses at least the cases claimed. It is further noted that the claim as written does not limit the first mode to only filter positions which partially cover the aperture and further does not limit the second mode to only filter positions which completely cover the aperture or completely withdraws from the aperture.

**[claim 13]**

Claim 13 is a method claim corresponding to apparatus claim 2. Therefore, claim 13 is analyzed and rejected as previously discussed with respect to claim 2.

**[claim 19]**

Regarding claim 19, Iura discloses an image pickup apparatus including an iris mechanism (Figure 18, Item 202) for changing an amount of light with which an image pickup element (Figure 18, Item 203) is irradiated by changing an aperture diameter (Figure 19; c. 18, ll. 58-65), the image pickup apparatus operating in a first mode and a second mode (c. 2, ll. 13-28; c. 19, l. 2 - c. 20, l. 5). However, Iura does not disclose a filter unit and control unit for controlling the filter unit as claimed.

Nanjo discloses that when using an iris diaphragm and the aperture becomes too small the quality of the captured image is reduced (c. 1, ll. 16-27). Nanjo further discloses that this problem can be solved by including an ND filter on an aperture blade to prevent deterioration of image quality (c. 3, l. 66 - c. 4, l. 7; Figures 1-3; note the use of a multiple density filter). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include an ND filter on the diaphragm of Iura to prevent deterioration of image quality when capturing images with a small diaphragm aperture. The examiner notes that since Iura discloses the use of the diaphragm for both still and video capturing according to an image signal luminance (Figure 19) and Nanjo discloses a filter which partially covers an aperture (Figure 2L) as well as fully covers an aperture (Figure 3T), Iura in view of Nanjo discloses at least the cases claimed. It is further noted that the claim as written does not limit the first mode to only filter positions which partially cover the aperture and further does not limit the second mode to only filter positions which completely cover the aperture or completely withdraws from the aperture.

***Allowable Subject Matter***

5. Claims 3-6, 14 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**[claims 3-6, 14 and 15]**

Regarding claims 3-6, 14 and 15 the prior art does not teach or fairly suggest an image pickup apparatus or method which performs drive control of a filter in the claimed manner. While it is known in the art to insert or remove a filter based on a threshold, the prior art does not teach the combination of such an operation with the filter control claimed in claims 2 and 13.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- |     |              |                 |
|-----|--------------|-----------------|
| i.  | Takei et al. | US 2007/0065135 |
| ii. | Takei        | JP 11-220652    |

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Henn whose telephone number is (571) 272-7310. The examiner can normally be reached on M-F 11-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on (571) 272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TJH  
9/30/2007



LIN YE  
SUPERVISORY PATENT EXAMINER